

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A bacterium~~Bacterium~~ *Tropheryma whippelii* responsible for Whipple's disease, isolated and established in culture, wherein the bacterium is *Tropheryma whippelii*.
2. (Currently Amended) A bacterium~~Bacterium~~ according to claim 1, obtained from a culture of human fibroblasts after at least 2 months of incubation in a culture medium based on MEM.
3. (Currently Amended) A bacterium~~Bacterium~~ according to claim 1, wherein said bacterium is deposited in the CNCM of the Institut Pasteur under Deposit No.~~the number~~ I-2202.
4. (Currently Amended) An antigen~~Antigen~~ of the~~a~~ bacterium according to claim 1.
5. (Currently Amended) An antigen~~Antigen~~ according to claim 4, wherein said antigen is a protein ~~selected from those with~~having a molecular ~~weights~~weight of about 35, 50, 60, 100 ~~and/or~~ 200 kD determined in ~~Figures 2 and 3~~ by polyacrylamide gel electrophoresis using the Western blotting technique.
6. (Withdrawn-Currently Amended) An antibody~~Specific antibody~~ directed against the~~a~~ bacterium *Tropheryma whippelii* responsible for Whipple's disease or an antigen of said bacterium.
7. (Withdrawn-Currently Amended) An antibody~~Antibody~~ according to claim 6, wherein it is a polyclonal antibody of animal origin, preferably a mouse immunoglobulin.
8. (Withdrawn-Currently Amended) An antibody~~Antibody~~ according to claim 6, wherein it is a monoclonal antibody.

9. (Withdrawn-Currently Amended) ~~An antibody~~Antibody according to claim 8, wherein it is a monoclonal antibody produced by a hybridoma deposited in the CNCM of the Institut Pasteur under the ~~registration number~~Deposit No. I-2411.

10. (Currently Amended) ~~An antigen~~Antigen according to claim 5, wherein said antigen is a protein of 200 kD, which reacts with a specific monoclonal antibody directed against ~~athe~~ bacterium *Tropheryma whippelii* responsible for Whipple's disease or an antigen of said bacterium, said antibody being produced by a hybridoma deposited in the CNCM of the Institut Pasteur under the ~~registration number~~Deposit No. I-2411.

11. (Currently Amended) ~~A method~~Method for the *in vitro* diagnosis of diseases associated with infections caused by ~~the bacterium~~*Tropheryma whippelii*, comprising ~~contacting~~bringing serum or any other biological fluid of a patient ~~into contact~~ with the bacterium of claim 1, and detecting an immunological reaction.

12. (Withdrawn-Currently Amended) ~~A method~~Method for ~~the~~ *in vitro* diagnosis of ~~the disease~~diseases associated with infections caused by *Tropheryma whippelii* ~~bacteria~~, comprising ~~contacting~~bringing serum or any other biological fluid of a patient ~~into contact~~ with the antibody of claim 6, and detecting an immunological reaction.

13. (Withdrawn-Currently Amended) ~~A method~~Method for the *in vitro* serological diagnosis of Whipple's disease, comprising ~~the steps which consist essentially of~~ detecting an immunological reaction between an antibody according to claim 6 and an antigen of ~~athe~~ bacterium *Tropheryma whippelii* responsible for Whipple's disease.

14. (Withdrawn-Currently Amended) ~~A method~~Method for the *in vitro* serological diagnosis of Whipple's disease, comprising ~~the step which consists essentially of~~ detecting an immunological reaction between a human immunoglobulin, which recognizes ~~the~~ bacterium *Tropheryma whippelii* responsible for Whipple's disease and an antibody specific for said human immunoglobulin.

15. (Withdrawn-Currently Amended) A method for the *in vitro* Method of
serological diagnosis according to claim 14, comprising ~~the following steps:~~

- depositing a solution containing athe bacterium *Tropheryma whippelii* responsible for Whipple's ~~disease~~disease, in or on a solid support;
- introducing ~~the test-serum or~~ any other biological fluid into or onto said support;
- introducing a solution of a labeled antibody specific for a human immunoglobulin, which recognizes said bacterium, into or onto the support;
- observing an incubation period;
- rinsing the solid support; and
- detecting ~~said~~an immunological reaction.

16. (Withdrawn-Currently Amended) A kit~~Kit~~ for the *in vitro* serological
diagnosis~~detection~~ of Whipple's disease by the method of claim 13, ~~essentially~~comprising the following components:

- a solution containing athe bacterium *Tropheryma whippelii* responsible for Whipple's disease or an antigen of said bacterium; and/or
- a solution containing at least one specific antibody directed against athe bacterium *Tropheryma whippelii* responsible for Whipple's disease or against an antigen of said bacterium; and/or
- a solution containing at least one antibody specific for a human immunoglobulin, which recognizes athe bacterium *Tropheryma whippelii* responsible for Whipple's disease.

17. (Withdrawn-Currently Amended) A kit~~Kit~~ according to claim 16,
comprising~~characterized in that it comprises~~ at least one labeled specific antibody.

18. (Withdrawn-Currently Amended) ~~A fragment~~Fragment of the *rpoB* gene of the bacterium *Tropheryma whippelii* according to claim 1, wherein said fragment comprises the nucleotide sequence set forth in SEQ ID NO:3.

19. (Withdrawn-Currently Amended) ~~An oligonucleotide~~Oligonucleotide comprising a sequence specific for the *rpoB* gene of the bacterium *Tropheryma whippelii* according to claim 1, wherein said specific sequence comprises ~~comprising~~ at least 12 consecutive ~~nucleotide units~~nucleotides ~~included in of~~ the sequence set forth in SEQ ID NO:3.

20. (Withdrawn-Currently Amended) ~~A single-stranded~~Single-stranded oligonucleotide according to claim 19, wherein the oligonucleotide has ~~selected from~~ ~~oligonucleotides having a sequence of at least 12 consecutive nucleotide units~~nucleotides of ~~included in one of the sequences of SEQ ID NOs: 4 and 5~~SEQ ID NO:4 or 5, and or ~~from the~~ oligonucleotides complementary to ~~these oligonucleotides thereto~~.

21. (Withdrawn-Currently Amended) ~~An oligonucleotide~~Oligonucleotide according to claim 19, ~~wherein it consists~~ consisting of the ~~sequence~~sequence set forth in SEQ ID NOs: ~~4 and 5~~NO:4 or 5.

22. (Withdrawn-Currently Amended) ~~A probe~~Probe for detecting *Tropheryma whippelii* ~~bacteria~~ in a biological sample, wherein said probe comprises a sequence according to claim 18.

23. (Withdrawn-Currently Amended) ~~A process~~Process for determining the presence or absence of ~~a~~ *Tropheryma whippelii* ~~bacterium~~ in a sample, which contains or may contain nucleic ~~acids~~acids of at least one of such ~~bacteria~~bacterium, comprising contacting ~~wherein said sample is brought into contact with~~ at least one probe according to claim 22, and determining the formation or absence of formation of a hybridization complex between said probe and the nucleic acid of the sample ~~is then determined~~.

24. (Withdrawn-Currently Amended) ~~A nucleotide~~Nucleotide primer, which can be used for synthesizing the *rpoB* gene of *Tropheryma whippelii* in the presence of a polymerase, wherein said primer comprises an oligonucleotide according to claim 19.

25. (Withdrawn-Currently Amended) ~~A method~~Method for the *in vitro* diagnosis of ~~the diseased~~diseases associated with infections caused by *Tropheryma whippelii* ~~bacteria~~, comprising ~~contacting~~bringing serum or any other biological fluid of a patient ~~into contact~~ with the antigen of claim 4, and detecting an immunological reaction.

26. (Withdrawn-Currently Amended) ~~A kit~~Kit for the *in vitro* serological ~~diagnosis~~detection of Whipple's disease by the method of claim 14, ~~essentially~~ comprising the following components:

- a solution containing ~~a~~the bacterium *Tropheryma whippelii* responsible for Whipple's disease or an antigen of said bacteria; and/or
- a solution containing at least one specific antibody directed against ~~a~~the bacterium *Tropheryma whippelii* responsible for Whipple's disease or against an antigen of said bacteria; and/or
- a solution containing at least one antibody specific for a human immunoglobulin, wherein said human immunoglobulin recognizes ~~a~~the bacterium *Tropheryma whippelii* responsible for Whipple's disease.

27. (Withdrawn-Currently Amended) ~~A probe~~Probe for detecting *Tropheryma whippelii* ~~bacteria~~ in a biological sample, wherein said probe comprises an oligonucleotide according to claim 19.

28. (Withdrawn-Currently Amended) ~~A process~~Process for determining the presence or absence of ~~a~~*Tropheryma whippelii* ~~bacterium~~ in a sample, which contains or may contain nucleic ~~acids~~acid of at least one of such ~~bacteria~~bacterium, comprising ~~contacting~~wherein said sample is ~~brought into contact~~ with at least one probe according to

claim 27, and determining the formation or absence of formation of a hybridization complex between said probe and the nucleic acid of the sample ~~is then determined~~.